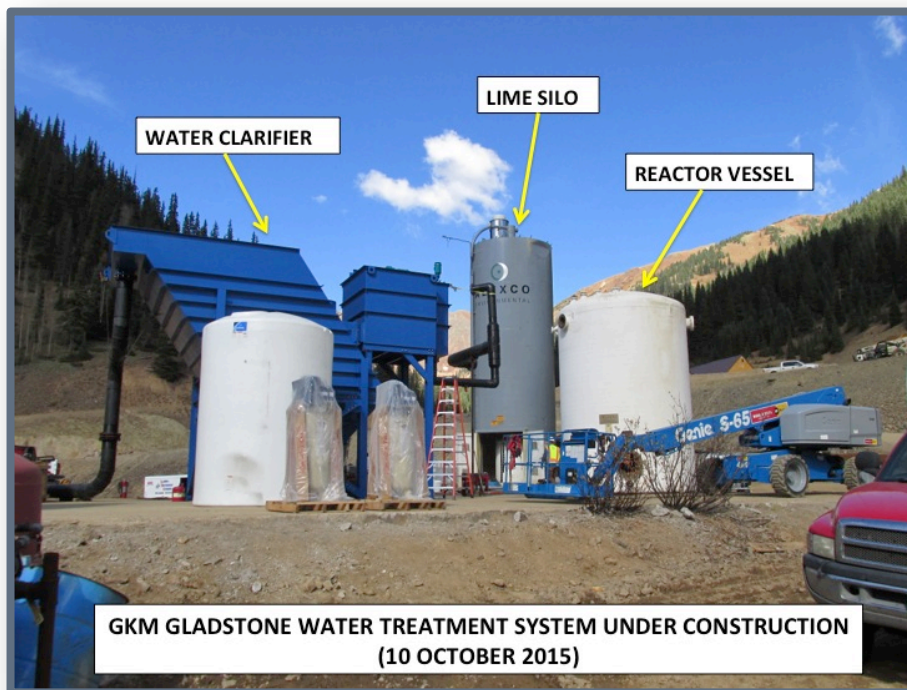


**SITUATION REPORT
INCIDENT COMMAND POST GOLD KING
GOLD KING MINE RELEASE INCIDENT
U.S. ENVIRONMENTAL PROTECTION AGENCY**



Subject: EXECSUM / SITREP #45
Gold King Mine Release Incident
San Juan County, Colorado
Latitude: 37.8945 Longitude: -107.6384

From: Situation Unit, Incident Command Post Gold King

Date: 13 October 2015

Reporting Period: 0700 06 October 2015 through 0700 13 October 2015

Website: www.epa.gov/goldkingmine



For Internal Use Only

EXECUTIVE SUMMARY

Situation Summary

United States Environmental Protection Agency (U.S. EPA) Incident Command Post Gold King (ICPGK) is comprised of U.S. EPA Regions 8, 6 and 9.

Highlights, Key Updates/Changes

- ICPGK is operating under a 2-week Incident Action Plan (IAP) covering the period of 06 October 2015 through 20 October 2015.
- Construction of the winter treatment system/facility has commenced.
- Incident Command (IC) ended outreach with private well owners after 30 September 2015.
- ICPGK is focusing on residential sampling data reviews and sending letters to residents.

Objectives

- Ensure health and safety of the public and responders.
- Continue private water deliveries to homes with Primary MCL Exceedances.
- Continue private well sampling for special cases only (no new requests have been received since 30 September 2015).
- Continue to facilitate transition of cooperative agreements between San Juan Basin Health Department (SJBHD), Colorado Department of Public Health and Environment (CDPHE), and Colorado Office of Emergency Management (OEM) to EPA Region 8.
- Continue to implement Transition Plan to reduce ICP, finalize a staffing and Interim Demobilization Plan to return operations to EPA Region 8.
- Continue coordination with federal, state, tribal and local stakeholders.
- Continue water and sediment sampling along the Animas and San Juan Rivers per the Incident Transition Plan to reduce sampling (currently sampling one time per week).
- Mine Operations
 - Continue management of mine water discharge.
 - Continue mine dump and portal stabilization and installing temporary piping systems.
 - Continue preparation and installation of portable modular water treatment system at Gladstone.
 - Operate Alert and Notification Plan during mine site operations.

Command Emphasis

For this operational period, the ICPGK command emphasis is:

- Safety of responders and the public
- Visitors to the mine site are required to go through a safety briefing. See mine site safety plan.
- Personnel entering Southern Ute Tribal lands must be escorted by a Southern Ute staff member.
- Ensure information flow between ICP and Stakeholders is transparent.
- Continue to reduce operations per the transition plan.

The metrics provided in this Situation Report represent quantities reported for work completed from 0700 06 October 2015 through 0700 13 October 2015. Press releases are presented in Attachment 1.



1.0 BACKGROUND

The Gold King Mine (GKM) near Silverton, Colorado is an historic gold mine at an elevation of approximately 11,300 feet above mean sea level. The mine discharge includes acidic mine drainage that is a contributor of heavy metals into the Cement Creek drainage of the Animas River watershed. The GKM workings have been inaccessible since 1995 when the mine portal collapsed.

On 5 August 2015, up to three million gallons (estimated) of water containing sediment and dissolved metals was suddenly released from the Gold King Mine adit. This water discharged into Cement Creek which feeds into the Animas River, and eventually flows into the San Juan River.

The ICPGK (located in Durango, Colorado) continues to assess and mitigate effects from the release.

2.0 OPERATIONS

2.1 Mine Operations

A summary of mine operations is presented below.

- Starting 08 October 2015, water flowing from the GKM portal is being captured by a cofferdam inside the mine and mechanically pumped down from the mine site.

Table 1 – Discharge Summary

Parameter	Units	Quantity							
		October 2015							Period Average
		06	07	08	09	10	11	12	
Flow Rate*	gpm	556	571	621	*705	*615	*565	*597	*604
pH Adit Discharge	SU	3.95	3.72	3.45	3.73	3.75	3.76	3.82	3.74
pH Discharge to creek	SU	5.00	5.08	5.43	5.63	5.34	5.44	5.65	5.37

*Note: Flow rates increased starting on 09 October 2015 because as of 08 October 2015, discharge is now being pumped mechanically from the mine rather than being gravity fed.

- 50% of discharge being treated at Red & Bonita treatment pond, and 50% bypassed.
- Work on North Fork Cement Creek restoration 99% complete.
- Removed lower catchment basin and upper diversion impoundment on 05 Oct 2015 so that water flows freely through Cement Creek channel.
- Piping and valving complete around Gladstone Ponds in preparation for installation of liner. Liner installation at Gladstone ponds started on 12 October 2015.
- Continued mucking out sediment from GKM.
- Installation of modular water treatment system at Gladstone continues.



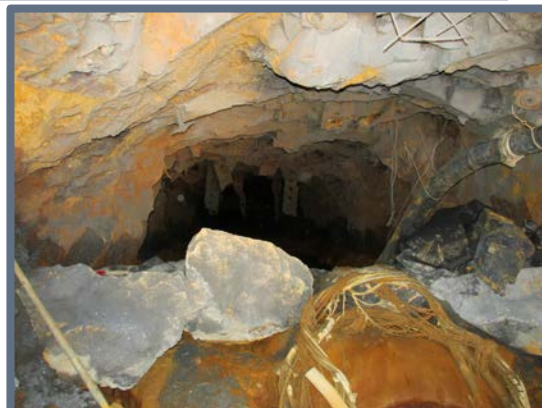
Grading and terracing of Geotube sedimentation area at Gladstone (10 October 2015).



- Began grading and terracing of the sedimentation Geotube pad at Gladstone.
- Continued monitoring of water quality at 6 locations twice daily. Associated metrics are summarized below.

2.2 River Sampling

Operational activities for surface water and sediment sampling are summarized below. Sample quantities are based on the SCRIBE database, and include field samples and quality assurance/quality control (QA/QC) samples.



Cofferdam and dewatering pump inlet pipe inside GKM adit (10 October 2015).

Table 2 - Operations Sampling Summary									
Matrix	U.S. EPA Region	Quantity							
		October 2015							Cumulative
		06	07	08	09	10	11	12	
Surface Water Samples	8	8	0	0	0	0	0	0	647
	6	0	0	5	4	0	0	0	550
	9	0	0	0	0	0	0	0	292
	Total	8	0	5	4	0	0	0	1,489
Sediment Samples	8	8	0	0	0	0	0	0	332
	6	0	0	5	4	0	0	0	543
	9	0	0	0	0	0	0	0	238
	Total	8	0	5	4	0	0	0	1,113

2.3 Private Well Sampling

U.S. EPA has collected and analyzed samples from drinking water wells located near the Animas River and San Juan River. There has been no sampling of private drinking water wells in U.S. EPA Region 9.

Private well samples that have metals concentrations greater than the Maximum Contaminant Levels (MCLs) and were collected from private drinking water wells during the first sampling event were sampled a second time to confirm the analytical results. In Region 8, the second round of samples at a given property were collected from the tap. Residents that have MCL exceedances have been notified.

A summary of private drinking water well sampling is presented below.

Table 3 – Private Drinking Water Well Sampling Summary									
Matrix	U.S. EPA Region	Quantity							
		October 2015							Cumulative
		06	07	08	09	10	11	12	
Private Drinking Water Well Samples Collected (from SCRIBE, includes QA/QC samples)	8	14	0	2	2	0	0	0	452
	6	0	0	0	1	0	0	0	290

Notes: Some residents were sent multiple results letters

Some residential sampling included surface water and/or sediment sampling.



Table 4- Summary of Wells with MCL Exceedances

Matrix	U.S. EPA Region	Cumulative
Wells containing contaminant concentrations above MCLs during second sampling event	8	4
	6	1*

*Note: One well in Region 6 exceeded the MCL for lead and after further assessment by the State of New Mexico and the U.S. EPA, it was determined that the exceedance was not related to the GKM incident.

2.4 Mitigation Activities

No public water systems are currently affected by the release or response operations. ICPGK continues to coordinate and deliver bottled drinking water to 6 residences in Region 8. Other public support activities completed are summarized below.

Table 5 – Completed Public Support (Cumulative)

Activity	U.S. EPA Region	Qty. (gal)	Qty. (hay bales)
Potable Water Deliveries	8	105,600	
Livestock / Agricultural Water Deliveries	8	133,770	
	6	1,104,990	
Agricultural Food Deliveries	6		244

During this period, US EPA Region 9 was scheduled to deliver 500 salt blocks to the Navajo Nation's Shiprock Chapter's Maintenance Center for distribution to ranchers and farmers. However, to date, completion of that delivery has not been confirmed. No additional agricultural food, water, or salt block deliveries are currently scheduled for Navajo Nation.

Ongoing public support activities are summarized below:

Table 6 – Ongoing Public Support

Activity	Entity	06 Oct – 12 Oct 2015				Cumulative			
		Deliveries (each)	Qty. (gal)	Qty. (hay bales)	Qty. (salt blocks)	Deliveries (each)	Qty. (gal)	Qty. (hay bales)	Qty. (salt blocks)
Livestock / Agricultural Water Deliveries	U.S. EPA R9	0	0			13	218,400		
	BIA	0	0			7	975,888		
Agricultural Food Deliveries	U.S EPA R9	0		0		22		8,448	

2.4.1 Water Tanks

On or about 15 August 2015, 15 black steel tanks (16,500 gallon capacity each) were delivered by the ERRS contractor to certain locations on the Navajo Reservation as part of the response to the Gold King Mine release incident. Prior to the last reporting period, 11 of the 15 tanks had been removed. During the last reporting period, the four remaining water tanks were removed.



2.4.2 Other Mitigation Activities

ICPGK continues to work with U.S. EPA Region 8 Regional Incident Command Team (RICT) and U.S. EPA Headquarters EOC regarding individual properties with potential sediment issues.

3.0 PLANNING

3.1 Environmental Unit

EU is preparing letters containing analytical results for private properties where U.S. EPA collected sediment and/or drinking water samples. Additional resources were added to the ICP EU to address this task.

A summary of private letters sent to date is provided below:

Table 7- Private Letter Summary as of 12 October 2015			
Approximate Total Number of Letters to be Sent	Letters Sent Prior to This Reporting Period	Letters Sent During This Reporting Period	Approximate Number of Remaining Letters to be Sent
430	340	78	12

3.2 Resources

The table below summarizes staffing numbers for the federal entities and agencies active in the response.

Table 8 - Personnel On-Site								
Location	Agency / Entity	October 2015						
		06	07	08	09	10	11	12
Mine	U.S. EPA	3	3	3	2	2	2	2
	USCG	4	4	4	5	5	3	5
	U.S. EPA Contractors	26	26	26	26	40	16	27
	Other	0	0	0	0	0	0	0
ICPGK	U.S. EPA	13	14	14	12	6	5	6
	USCG	0	0	0	0	0	0	0
	U.S. EPA Contractors	18	17	16	16	11	3	12
	Other	0	2	0	0	0	0	0
U.S. EPA Region 6	U.S. EPA	1	1	1	1	1	1	1
	USCG	0	0	0	0	0	0	0
	U.S. EPA Contractors	2	2	2	2	2	2	2
	Other	0	0	0	0	0	0	0
U.S. EPA Region 9	U.S. EPA	0	0	0	0	0	0	0
	USCG	0	0	0	0	0	0	0
	U.S. EPA Contractors	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0
Total		67	69	66	64	67	32	55

USCG = U.S. Coast Guard; Other = federal, state, local and tribal entities



4.0 FINANCE

4.1 Estimated Response Costs to Date

The table below summarizes estimated costs for the response.

Table 9 - Estimated Response Costs Reported as of 07 October 2015					
U.S. EPA Region	U.S. EPA Cumulative Expended Payroll	U.S. EPA Cumulative Expended Travel	U.S. EPA Cumulative Other Charges	U.S. EPA Cumulative Contractors Cost	Total Cumulative Costs
8	\$1,022,962	\$216,213	\$46,109	\$7,174,682	\$8,459,966
6	\$610,852	\$152,050	\$12,989	\$2,615,912	\$3,391,804
9	\$268,404	\$68,619	\$0	\$2,269,300	\$2,606,323
Total	\$1,902,218	\$436,882	\$59,098	\$12,059,894	\$14,458,094

4.2 Estimated Burn Rates

The table below summarizes current estimated burn rates for the response.

Table 10 - Estimated Daily Burn Rates as of 07 October 2015	
U.S. EPA Region	Estimated Average Daily Burn Rate
8	\$131,500
6	\$11,020
9	\$12,700
Total	\$155,220

5.0 LOGISTICS

As of 12 October 2015, the following personnel needs remain to be filled:

- None.

6.0 SAFETY

Safety performed the tasks summarized below during this reporting period.

- Finished Updating the Medical plan.
- U.S. EPA Region 9 has elected not to be covered under the ICPKG HASP and they will provide their own HASP.
- Safety performed field inspections of: mine operations and river sampling operations.
- Provided safety briefings to visitors and reporting personnel.

No recordable injuries or illnesses reported.



7.0 PUBLIC INFORMATION

7.1 Community Engagements and Public Events

Community engagements and public events that occurred during this period include:

- None Reported.

A summary of community engagements is provided below:

Table 11 – Community Engagement Summary								
Description	U.S. EPA Region	October 2015						
		06	07	08	09	10	11	12
Community Engagement	8	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0

7.2 VIPs/Congressional Visits

7.2.1 Occurred Events

Visits that occurred during this period include:

- None Reported.

7.2.2 Anticipated Events

Known site visits and public events scheduled for the next 14 days are summarized below.

Table 12 - Anticipated Site Visits and Public Events Summary	
Planned Event	Anticipated Date
Media Tour of Mine Area by County Representatives	15 OCT 2015 09:00
Media Tour of Gladstone Area by local TV Station and Colorado Public Radio	15 OCT 2015 16:00

7.3 Call Center

U.S. EPA Headquarters continues to operate a national call center (844-607-9700). Calls received through 30 September 2015 requesting sampling of private drinking water wells were forwarded to ICPGK Operations via the PIO.

8.0 LIAISON

Federal, regional, local and other entities participating in the response are summarized below.

U.S. EPA
U.S. Coast Guard (USCG)
U.S. Geological Survey (USGS)
U.S. Army Corps of Engineers (USACE)
U.S. Bureau of Reclamation (USBOR)
U.S. Fish and Wildlife Services (USFWS)



Colorado Office of Emergency Management (OEM)
Colorado Department of Public Health and Environment (CDPHE)
New Mexico Environment Department (NMED)
New Mexico (NM) Department of Health
NM Office of the State Engineer
NM Department of Game and Fish
State of Utah
State of Arizona
City of Durango
La Plata County
San Juan County
San Juan Basin Health Department
County of San Juan – New Mexico
Southern Ute Indian Tribe (SUIT)
Navajo Nation

9.0 SOURCE OF ADDITIONAL INFORMATION

For additional information, refer to www.epa.gov/goldkingmine.



ATTACHMENT 1
PRESS RELEASES



Exec. Sum/SITREP #45 (13 October 2015)
Gold King Mine Release Incident
ICP Gold King

NO PRESS RELEASES WERE ISSUED DURING THIS REPORTING PERIOD
